VALEDICTORY ADDRESS

DELIVERED AT THE

THIRD ANNUAL COMMENCEMENT

OF THE

MARYLAND COLLEGE OF PHARMACY,

MARCH 15, 1859.

BY

LEWIS H. STEINER, A.M., M.D.,

PROFESSOR OF CHEMISTRY.



PRINTED BY FREDERICK A. HANZSCHE,
No. 212 Baltimore Street, near Charles.
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THE PHARMACY OF TWO HUNDRED YEARS AGO, COMPARED WITH THAT OF THE PRESENT DAY.

LADIES AND GENTLEMEN:

The nature of man is twofold. Body and spirit are both necessary to the idea of a human being .—without the latter we have mere matter—the slave of physical laws, not gifted with the power of controlling the elements, but controlled by them, without the former, there is nothing left but huge, misshappen emptiness, of which the mind can take no cognizance or acquire any conception. Hence form and spirit are necessary to each other in the conception of man. Without their presence, no adequate idea can, indeed, be acquired of anything in the realm of nature. The sacred historian informs us that, in the beginning—"the earth was without form and void, and darkness was upon the face of the deep," but when, in the council-chambers of eternity, it was determined that man should be created. that a reasoning being should be formed whose highest glory should be to magnify his Creator's name, and to praise Him from the earliest dawn of his existence to the closing moments of life,—form and shape were given to the chaotic elements, - the great beginning of time was marked by the establishment of the earth and the enactment of those laws which have regulated the same from its earliest appearance on the arena of existence. The earth was thus established, containing,

"Groves whose rich trees wept odorous gums and balm,
Others whose fruit burnish'd with golden rind
Hung amiable, Hesperian fables true,
If true, here only, and of delicious taste.
Betwixt these lawns, or level downs, and flocks
Grazing the tender herb, were interpos'd,
Or palmy hillock, or the flow'ry lap
Of some irriguous valley spread her store,
Flowers of all hue, and without thorn the rose."

And from that morning hour of time, on, through tedious minutes and slow-moving hours, until the present when the world has seemed to reach the zenith of existence, the law still remains the same that an idea does not attain its full meaning until it is enveloped in some form,—and that forms are the necessary media, by which we are enabled to bring to the comprehension of the human intellect, the spiritual meanings they are intended to convey. Whatever power disembodied spirits may have of appreciating that which is not invested with fixed and definite forms, we are happily not able to determine, but we know that man can never think of even the spiritual and eternal, without investing it with a form which may be clear, distinct and intelligible to his own mind. And thus, our ideas of the Deity himself are mainly acquired by a considerration of His embodiment in the form of the God-man, even the blessed Saviour himself; and without such an aid to the religious mind there is an almost irresistible proclivity to the worship of some awful, inexpressible and shapeless being, whose existence is terrible to the human mind.

It is easy to see, then, that there must be some form for everything which the human mind endeavors to dwell upon, and make the object of its worship or its study. And man has caught this idea, and embodied it in his pageants and ceremonies,—in his governments and public officers. No one can doubt but that Law itself is something independent of, and above all, human representations of it. Yet mankind requires that it should be expressed in words, fitly and aptly selected, that its administration should be vested in men selected in accordance with certain, definite rules, and that it should be surrounded with insignia bringing to all minds the assurance of its power and might. We have been accustomed to such for centuries, and the very security of our personal liberty depends upon their continuance. No man would be willing to have them abrogated, and to make each individual the arbiter of right and wrong,-the judge of crime and the inflicter of its proper punishment. From this would result a state of anarchy and misrule, fatal to anything like freedom or independence of action.

In the republic of letters the same principle holds, as in the department of human law. There must be forms, which shall communicate to the external world, the acts of this republic. which shall be the embodiments of laws, and hence, while entitled to respect for the authority they convey, shall prevent unauthorized persons from wielding the privileges they confer upon the worthy and the proficient. These forms are found all through the student's life; they separate him from the professor, -invest the latter so long as he is in the professorial chair with certain peculiar privileges, separate and distinct from the learner who occupies the scholar's seat.—require that the representatives of learned institutions should subject applicants for their honors to a thorough and impartial examination before such are awarded, and finally that the award should be made in public assemblage, before their countrymen, presenting the student with the laurel wreath which his labors have deserved, making the occasion joyous with the sound of triumphant music, significant or symbolic of the future reward awaiting every useful and good man at the termination of a life of struggle, and invoking the blessing of the great Father of us all upon the labors and trials of the neophyte thus about to enter upon the struggles of life.

We need to make no apology for bringing an audience together to witness the ceremonies of an Annual Commencement. In this enlightened age, every one knows why the occasion of graduation, in any art or science, should be made public and formal. The full importance of the thing itself is thus brought to bear most strongly on the student's mind. The solemn nature of the duties that his new position will gather around him,—the gathering of his fellow-men to witness his assumption of those duties,—the solemn words of the man of God, who invokes Heaven's blessings upon his endeavors to perform them honestly and uprightly, -aye! even the sweet strains of music suggestive of those quiet and soul-enrapturing moments of rest when, in the future, he shall look back upon "a life well spent,"-all these are of magic power in impressing upon the student's mind the importance of the position he occupies and its relation to the great, busy drama of life in which all men are actors. Is not such an occasion one of significance to the student? does it not, even while the flush of victory mantles his cheek, and the flash of pride darts from his eye, indicate to him, in unmistakable language, that his future life must be one continuous effort to deserve his honors by showing the world his fitness to bear them,—that he must find in his inmost soul that:

"Not enjoyment, and not sorrow, Is our destined end or way; But to act that each to-morrow Finds us farther than to-day."

For three winters, the Maryland College of Pharmacy has thrown open full courses of Lectures on subjects of importance to the students of Pharmacy. It was not upon the impulse of the moment that it instituted its course of instruction, but after calm and prudent deliberation, and in full view of the important relations the Pharmaceutist holds to the rest of the community. Pecuniary reward was no actuating motive in the determination of this action. Sense of duty and professional pride impelled them to spare no exertion, toward the proper education of those of their own calling who were called upon to act as the physician's assistants by the bedside of suffering humanity. Educational influences were being brought to bear upon all professions and trades, and they felt that such should also be called to aid in their own pursuits, and fit its followers for the duties devolving upon them. The College was opened with a discouragingly small number of students, -and the enterprize, viewed in a business light, was a failure. But there was a higher stand-point from which to view the whole; and from that, both Trustees and Faculty were taught to recognize the small beginning as of good omen. It was important that the Pharmaceutists as a body,—that this community, should recognize the necessity of College training, and it was a matter of special congratulation to find the smallest sign of such a recognition. The sign was gratifying and indicative of the dawn of better things in the future. The class, small in number, was composed of young men who felt deeply the necessity of preparing themselves for the duties of life, and the interest taken in the course of instruction gave the Faculty satisfactory proof that

their labors were not thrown away. With each succeeding course of Lectures, an increased number of students has been found occupying the seats in the Lecture Room, and a spirit full of zeal and enthusiasm for thorough information has manifested itself in the members of the class. The course, which has just terminated, has been attended by more students, than either of its predecessors, and now, at its close, we are assembled to witness the award of the highest honors of the College to those whose examination has been creditably and honorably under-The class is not large, and the casual observer might ask whether, after all, the project of a College of Pharmacy in Baltimore has not proven a failure. We must not however base the efficiency or utility of Colleges upon the number of their graduates, but upon the value of the instruction they impart, and the qualifications of those that graduate,—upon the zeal and spirit of their students, and the effect these are producing on the community. Viewing the College of Pharmacy, in this light, we proudly say that its past career has been a success, and its future is of good promise. There is more life in the Pharmaceutic profession, in this city, now, than was ever known before, -more close and accurate knowledge of the various branches of science, required in its pursuit,-and, in consequence, a higher and more dignified appreciation of the nature and importance of Pharmacy. Indications, of the truth of this assertion, meet us on all sides. and the pages of "The Journal and Transactions of the Maryland College of Pharmacy" furnish convincing proof in the character of the original contributions, which the Pharmaceutists of this city have, from time to time, contributed. Such cheering indications bid us confidently believe that the Pharmaceutists of Baltimore will occupy that place in the van, among their brethren of the United States, that the hospitality and whole-souled liberality of the men, and the loveliness and surpassing beauty of the women of the monumental city have had assigned them, as it were by acclamation. To attain this the trammels of old forms must be thrown aside for such as are better suited to a progressive and scientific age. To use the language of the shop, the process of Displacement must be

adopted, and the scientific extract will thus be freed from all material that might render it turbid by continuous precipitation The vender of herbs that are vaunted as "good for measles and fits." must be driven to his hut by the mountain side,—and his place filled by one who can claim an acquaintance with the active principles of medicinal agents, and know how to compound them according to scientific rule. If the age of Nicholas Culpepper be passed away, why should the traditionary instructions received by Pharmacy from him, two hundred years ago, still linger in the shop? Why should not the stirring notes which science is sending forth, in all parts of this vast republic, be taken up by the Pharmaceutist and be made the sound cheering him on to study, and to victory over nature. Such interrogatories are receiving their proper answer at the hands of the College of Pharmacy, and we feel that the past is but an earnest of what can be done in the future. The main difficulties are in the attainment of a prudent commencement of an enterprize. Well begun is half done.

An occasion, like the present, cannot be passed over, however, without asking the attention of the kind friends, who are here to witness the exercises, to the consideration of some subject connected with the objects of the College. It may be well to look at the Pharmacy of two hundred years ago and compare it with its present condition. By such a contrast, we may best be enabled to judge of the contributions, which Chemistry and Natural Philosophy have made towards elucidating its mysteries, and then, how transcendently important it is that these sciences should be made the Pharmaceutist's teachers and guides. In fact we can only judge of the progress of the age in any thing by such a contrast with the past. Constant familiarity with the advantages of the present, make us forgetful that there was a time when they were not in existence.

Were we to examine the pages of History, prior to the Seventeenth Century, still greater discrepancies would strike us. We should read of a wonderful sympathetic powder, which was said to have been thus tested by Sir Kenelm Digby.* "He took a bandage which had been used by a gentleman

^{*}The Cradle of the Twin Giants, I p. 117.

whose hand had been wounded in a duel, and dipped it in a solution of the powder. No sooner was the bandage wet than the pain in the hand ceased; and afterwards, when Sir Kenelm took the bandage out of the solution, and hung it by the fire to dry, the gentleman suffered the most acute pain in his hand, and declared that he felt as though it were on fire. The bandage was again put into the solution and kept there till the patient recovered." This wonderful cure was effected by means of a powder made of "Roman Vitriol," beaten in a mortar, sifted in a fine sieve, "when the sun entered Leo."

In those days, Medicine and Pharmacy were associated; and the same person practised both, either being knavishly inclined to deceive his fellow-men, or having gulped down, with wondrous credulity, the incongruities that ignorance had collected together, believed himself called upon to use them for the good of his fellow-men. Astrology had attained such a hold on the minds of men that it formed the basis of all medical practice. In full view of its precent the student was warned not "to give medicine, unless the moon be in a watery sign, or let a watery sign ascend, and let the moon be aspected by any planet which is direct, and if swift in motion and under the earth the better: by no means let the moon be aspected of any retrograde planet, for then the patient will be apt to vomit," Such miserable jargon forms the burthen of the therapeutic and pharmaceutic writings of those days. As we peruse the huge tomes containing them, it is difficult to imagine that the language employed is our own English,—at a period when we should be disposed to consider it undefiled or contaminated by foreign importations.

Let us take as a type of the Pharmacy of the seventeenth century,—Culpepper, who is styled by Dr. Johnson, as "the man that ranged the woods and climed the mountains in search of medicinal and salutary herbs, and who has undoubtedly merited the gratitude of posterity." It is amusing and instructive to examine the pages of the "Complete Herbal," and "English Physician." The main idea is the control of the stars over the affairs of man, and the peculiar planet, ascendant at the time of the selection of the vegetable, is supposed to govern

its properties and control its action. This gave rise to a style, interesting from its complications and vague assertions,—which makes the reader marvel whether the writer is not "making game" of his credulous contemporaries. Not only is the vegetable kingdom scoured for disgusting draughts, which shall be specially potent in the treatment of disease, but the animal kingdom is taxed to the utmost to produce materia medica that are supposed to be endowed with wondrous curative properties. The advertisements of the modern quack, who bodly pretends "to cure all diseases," and, with a Dulaneyian disregard for rhetoric or English grammar, strings together the most ridiculous incongruities for the edification and wonder of his admirers—are more than equalled by the curious statements that Culpepper makes concerning the magic virtues of the animal kingdom:

"Millipedes, being bruised and mixed with wine, help the yellow jaundice;" "the flesh of vipers, being eaten, clears the sight, helps the vices of the nerves, resists poison exceedingly. neither is there any better remedy under the sun for their bitings than the head of the viper that bit you;" "earthworms are an admirable remedy for cut nerves being applied to the place;" the ashes of ants, being applied to a tooth, will cause it to fall out,—certainly a less painful operation than the use of the dentist's forceps; oysters applied alive to a pestilential swelling, draw the venom to them; "swallows being eaten, clear the sight, the ashes of them (being burnt) eaten, preserve from drunkenness, help sore throats and inflammations;" "the liver of a frog being dried and eaten, helps quartan agues;" "bear's grease stays the falling off of the hair,"—an idea still prevalent with the people; "Honey is of a gallant cleansing quality, exceedingly profitable in all inward ulcers in what part of the body soever," and "Fox grease helps pains in the ears." These are a small portion of the list of remedial agents, which, in that day, were employed as of special efficacy in the treatment of disease. The apothecary was expected to prepare the loathsome mixture, and his fellow-man, with remarkable patience, submitted himself to the horrors of the resulting nauseous dose. Even now medicine is not popular with the sick, but dare we transport ourselves to the day when this was the armament, with which the physician attacked disease? Imagine the grave solemnity investing his face, as he consults the astrological indications furnished by the position of the planets in the heavens at our birth, and after having obtained the decision of the stars, then orders the offensive draught. Do we wonder that such quackery should have required mystery to prevent mankind from expelling it from civilized society? It was only in darkness and ignorance that it could shoot forth and grow to such prodigious dimensions. Success made it arrogant and pretentious, and often we find curious denunciations invoked by its followers upon those who were unable to comprehend their jargon. Culpepper closes a notice of Wormwood with this precious morceau, which is charming to the lover of the curiosities of literature. "He that reads this, and understands what he reads, hath a jewel of more worth than a diamond; he that understands it not, is as little fit to give physick. There lies a key in these words which will unlock (if it be turned by a wise hand) the cabinet of physick: I have delivered it as plain as I durst; it is not only upon Wormwood as I wrote, but upon all plants, trees and herbs; he that understands it not, is unfit (in my opinion) to give physick. shall live when I am dead. And thus I leave it to the world, not caring a farthing whether they like it or dislike it. The grave equals all men, and therefore shall equal me with all princes; until which time the eternal Providence is over me: Then the ill tongue of a prating fellow, or one that hath more tongue than wit, or more proud than honest, shall never trouble me. Wisdom is justified by her children. And so much for Wormwood."

As a necessary consequence of an absolute ignorance of Chemistry, the selection of articles to form a prescription in those days must have not only comprised a number of disgusting articles, but also substances chemically incompatible, since they fully neutralized each other. It was the age of complicated medication. The more complex the prescription, the better was it fitted for the physician's purposes. Each practitioner felt it necessary to show his own originality by adding some

new article to the number of those which were required in the preparation of the popular remedy. Hence they grew wonderfully in size, and an Ossa of monstrosities was piled on a disgusting Pelion, until no witches' caldron could boast a more miscellaneous mass, even though it contained

"Toad, that under coldest stone, Days and nights hast thirty one,"

And a chorus of witches had chanted around it,

"Double, double toil and trouble; Fire, burn; and, cauldron, bubble."

Thus one preparation, known as Mithridate,* consisted of 55 ingredients, which in the form of an Electuary was considered as an antidote to all poisons, and a general remedy for all diseases, that the human flesh was heir to. Indeed the diseases for which it was said to be applicable, are as varied and different as the tissues in the animal body; and yet thousands implicitly believed in its virtues and remedial qualities.

It is readily seen that the peculiarities of the Pharmacy of the seventeenth century depended upon the ignorance of its cultivators,—an ignorance which was altogether unavoidable in the early history of an art requiring so much scientific knowledge before it could be properly prosecuted. Faulty observation or the misapplication of some whimsical theory had attributed false properties to the productions of nature. This was the first error. The second necessarily flowed from it,—that no medicine could possibly interfere with anothers action when mingled in a compound, but that if all, which were supposed to have certain therapeutic action were combined, the effect would be heightened in the cure of the disease. The

^{*}As a Pharmaceutic curiosity the following formula for the preparation of this Electnary is given; "Take of Myrrh, Saffron, Agarick, Ginger, Cinnamon, Spikenard, Frankincense, Treacle, Mustard seeds, of each ten drams, the seeds of Hartwort, Opobalsamum, or Oil of Nutmegs by expression, Schenanth, Stoechas, Costus, Galbanum, Turpentine, Long Pepper, Castorium, juice of Hypocisti's Styrax, Calamitis, Opopanax, Indian leaf, or for want of it—Mace, of each an ounce, Cassia Lignea, Poley Mountain, White Peppor, Scordium, the seeds of Carrots of Crete; Carpobalsamum or Cubebs, Troch, Cypheos, Bdelium, of each seven drams, Celtic Spikenard, Gum Arabic, Macedonian Parsley, Seeds, Opium, Cardamoms the less, Feunel Seed, Gentian, red Rose leaves, Dittany of Crete, of each five drams, Annis seeds, Asarabacca, Orris, Acorus, the greater Valerian, Sagapen, of each three drams, Meum Acacia, the bellies of Scinks, the tops of St. John's Wort, of each two drams and a half, Malaga Wine, so much as is sufficient to dissolve the juices and gums, clarified Honey the treble weight of all, the Wine excepted, make them into an Electuary according to art."

Pharmacy of this period no longer numbers the educated among its cultivators, but is too often referred to with a sneer and spoken of with contempt. Let us not despise it. For all that it contained of truth has descended to our day and is conferring its benefit upon the medical practice of the present. The thick storm clouds, with their attendant flashes of startling lightning and awful peals of thunder, are required at times to freshen up the atmosphere, after a long season of drought and suffering. They are followed by those delicious mornings of summer, when the grass seems decked with a thousand gems, when the air is vocal with the melodies of countless birds and fragrant with the perfumes of the meadow flowers; and man goes forth to his daily labors with a keener relish for life and its joys. The storm clouds have been the agents of a superintending Providence, and have cleared the way for the auspicious smiles of nature. And thus it is in the intellecual world: full often when we are most disposed to despair on account of the gloomy clouds of contradiction and ignorance that cover its skies; we forget that these are but the necessary preparations for a brighter morn, when all shall become brighter and dearer and more attractive to the soul of man. The darkest hour precedes the dawn,-the period of gloom but bids us prepare for the appearance of light that shall be joyous and attractive.

The studies of the Seventeenth Century and its predecessors have not been in vain, for out of the mass of rubbish which they had accumulated many rich gems of knowledge have been gleaned, that have proved valuable to the science of our own day. Indeed it is impossible for an honest mind to devote itself to the study of any branch of science without acquiring some fact that shall be a real addition to human knowledge. Such additions become numerous, in proportion as the laborer has full light to aid him in his researches, but even a mite must not be rejected from this treasury. The vast domain of nature is laid before man for his constant study and thorough examination, and he dare not reject the labors of his forefathers, if he wishes to do his full duty. These have furnished him facts, which lead to the discovery of principles, and sim-

ple gratitude requires that the former be not disregarded, or

their authors forgotten.

But what is the Pharmacy of the present day? no longer a mere art, but a science conjoined with an art,—based on strict laws, controlled by the rules of physics and chemistry, exhibiting the beautiful attractions of an architectural structure that command the eye and please the taste of the student of progress. No longer confined to the sale of inert or discusting commodities but devoted to the extraction of the true active principles of the materia medica, to the preparation of such articles as will best fit the physician for his combat with the hydra-headed monster-disease,-it now takes its place along with those pursuits which are especially attractive to the ingenious and studious youth of our day. To the ignorant, it may appear to be conjoined with quackery in all its varied forms, but the fact is clear and unmistakable, that, in proportion as an anothecary becomes thoroughly conversant with the scientific principles of his calling, must be, if he be an honest man, feel a contempt for that brawling pretension which claims the ability to cure all diseases with any one particular remedy. If he is necessitated to keep a certain character of specific medicines, he must constantly look upon it as a disagreeable necessity, and labor hard to prepare the way for their banishment to the stygian waters of forgetfulness. In those countries where Pharmacy flourishes best, we find quackery has dwindled away so that it no longer occupies a place on the shelves of the shop. In our own land, its temporary quarters must speedily be taken from it, as the spread of science can not permit any such companionship. Its abode is most secure where ignorance reigns, where medicine is confined to routine treatment of disease, and true knowledge has not shed its benignant light. Every advance in science, is a contribution, to that low funeral sound which announces the coming of the hour of its final interment. It cannot stand the full glare of light that science sheds over the path man is treading, and hence it must ever seek the dark recesses of our country, -must fly to the owls and bats that delight in obscurity, and with such temporary companionship await its inevitable doom.

The peculiarities of the Pharmacy of the Past were the attribution of false or imaginary properties to the materia medica, and the after improper admixture of these in the preparation of remedies. Let us see how the Pharmacy of the present differs from that of the past in these two points.

I. The application of a better knowledge of Chemistry has taught the student of nature that the active properties of medicines are mostly resident in some special principles, which make up but a small percentage of their weight or volume. With this idea before him, he labors to detect the principle that may be the source of activity in each,—to determine the best mode of extracting it from the mass of other material, that is medically inert, and to test fully its properties therapeutically and chemically. The result of this has been to banish huge doses from the sick room, to furnish the physician with medicines in a concentrated form, so that all their action can be had in the shortest possible time. Not only has this resulted, but such medicines are prescribed with more certainty by the Physician, as he knows that he can rely upon their strength.

In this sphere of usefulness the pharmaceutist has but commenced his labors. Already over a hundred alkaloidal and other principles have been detected as embodying the active properties of his drugs,—but a vast field for careful research and honest toil lies before him, claiming all the energy and enthusiasm of youth in its proper cultivation. Here are to be found more attractive objects for study and diligent investigation than in the preparation of quack remedies and the profits resulting from their sale. Honor, professional pride, a desire to do something for the good of his fellow men, the promptings of an inquisitive mind, the love of science, keen sense of his religious duty to increase the sum of human knowledge,—all these call upon the pharmaceutist to labor in this field.

The discovery of these proximate principles has dealt a deathblow to that form of quackery, which has boasted of the minuteness of the dose in which it administered its medicaments, claiming that by dilution increase of strength is attained. Such a death-blow has been given, inasmuch, as chemistry has shown that when the active principle is obtained, diminution of dose only produces diminished effect, as our common sense had long since taught us. The pillule of strychnia or morphia is not administered because a larger quantity would be of less efficacy or potency, but because it would be endowed with *deadly* power. A small quantity is employed in consequence of the strength of the agent when used in larger dose, and not because power has has been gained by the division.

II. Pharmacy has learned what medicines are chemically incompatible with each other, and thus avoiding the formation of inert substances in the articles prepared for the sick, has simplified the remedies prescribed by the physician. While complexity is a striking characteristic of the remedies employed in past centuries, simplicity, on the other hand, marks those of the present day. Medicinal agents are not only selected with reference to their action on disease, but also with reference to their action on each other. Should they combine together so as to produce inert compounds, it would be useless to administer them to the sick. Such an interrogatory must be asked by every physician as to the articles entering into the composition of his prescription, and the chemical pharmaceutist must supply him with the proper answer, from his own previous investigations.

The age of huge, lumbering prescriptions has passed away, and no more is heard of the Mithridate Electuary or of Venice Treacle, except in the shop of some venerable apothecary, on whose skirts a strong odor of Alchemy and Astrology still lingers with wondrous pertinacity,—whose mental constitution having been attuned to the past, can work in no sort of harmony with the accords of the present, and whose pretensions to the name of pharmaceutist are a libel upon the whole profession.

We have been able to cast only a superficial glance at the condition of the Present of Pharmacy, but it has been enough to show how encouraging are the prospects before us. It is a profession now that calls for the undivided energies of its members. No study that they can undertake, can well be out of place, especially if it have to do with the wonders of nature. The mineral kingdom opens up its vast resources and bids it

take that which may prove efficient and useful, furnishes deadly poisons and the agents by which these may be made innocuous and harmless; the whole domain of the vegetable world is replete with healthy balsams, and restorative agents, and every breath of air wafted across the meadows brings, with it, the odor of something that may prove useful in the treatment of disease. The keys to this treasury are furnished by Chemistry, and he, that will, may enter and draw forth inestimable treasures from the stores of nature.

The pharmaceutical profession is one of honor: standing between the physician and the remedies which he asks at nature's hands, the pharmaceutist is, at the same time, aiding in that highest act of human philanthropy—rendering assistance to suffering humanity,—doing one of the tasks which has been confided to his race—subduing nature to his behests. Let him feel the dignity of his calling,—let him understand the importance of the duties that devolve upon him, and he must feel that every motive that can impel an honorable, christian man—to labor uprightly and conscientiously is especially urgent upon him. All the rewards that might be attained by a trifling flirtation with the meretricious form of Quackery, are as nothing when compared with the depth of true love which a proper view of the chastity and purity of science will excite in his bosom.

But as the elevation of our associates intellectually and socially is a proper subject for every man's ambition, we claim that our College of Pharmacy, whose sole object may be considered the intellectual improvement of the cultivators of Pharmacy, should receive the warmest and most zealous support from the Apothecaries of Baltimore. Through its agency, vacancies in the ranks will be filled by youths who have been properly trained and drilled in the service, who have been taught, in the lecture-room, to scan carefully the results and processes of the laboratory,—to institute new investigations for themselves,—to bring life and activity to the daily routine of their duties,—and to labor for the honor of their brethren and the advancement of their chosen calling. Through its agency, a line will be drawn—separating the ignorant drug-vender,

from the accomplished master of his art, showing the public the obliquy and contempt which the former deserves, and the honorable success which belongs to the latter. The day has past when blind ignorance can be tolerated in any pursuit, if the lamp of truth is to be had for the illumination of its intricate recesses. We claim therefore, Apothecaries of Baltimore all your sympathies and enthusiasm for our work. Your own honor and pride demand it,—humanity itself, at the mercy of the Anothecary to a great extent, demands it,—and every thing that is sacred imposed upon you in the form of duty requires that you should aid in the efforts now made to put your profession in the most useful position in our community. You have thus far not been derelict of duty,—let not your efforts flag in the future, and it will need no prophetic spirit to assure you that generations, yet unborn, will be heartily grateful for your efforts to protect them from the effects of ignorance and stupidity, to aid the physician in his efforts to alleviate disease There are laurels to be won in other ways than on the battlefield,—there are crowns to be gained, by the faithful laborer. wherever he may prosecute his honest toil. There are rewards to be attained which are far above all that money or public office can confer. These are all before you,—are before every one who labors for the good of his fellow-men.

But, gentlemen graduates, I must not forget that a few words are yours on this occasion,—and not the less are you entitled to them because of the smallness of your number. I have been selected by the authorities of the College to pronounce the final word that shall sever the relation of teacher and pupil, that shall bring out, in some way, to you the significance of this occasion,—this Commencement of a new era in your existence,—this beginning of responsibility of a higher order than you have yet incurred. A few words then, in conclusion, as to your duties.

The occasion of an Annual Commencement is not designed I take it, merely for the exhibition of rhetoric on the part of a speaker or even for the performance of attractive music from those skilled in the production of sweet and harmonious sounds. There is in it a significance, which would remain, although the occasion

should be devoid of speech and music. It is not the mere award of honor for diligent and attentive study in the past. There is about it something higher and of greater importance even than this. Every reward obtained by a man, fastens the obligation on him to labor with renewed efforts to show the world that he has deserved it. The presentation of a sword to the soldier, for gallant conduct on the field of battle, does not free him from the duty of continuing to exhibit such and even greater bravery whenever occasion may require,—it certainly does not free him from public indignation, should he act the coward's part, afterwards, when danger threatens. So with the student who has finished his collegiate course. The award of the diploma does not confer the privilege of future indolence,—does not in any manner justify a lapse into ignorance or stupidity. No! it imposes upon him the necessity of doing more in the future than the past.—it requires him to push forward with renewed vigor towards the attainment of the highest possible acquaintance with those very subjects, for proficiency in which he has been honored. If he fall back,—if he prove the coward afterwards,—the cowardice will only be the more disgraceful since the world has been induced to believe by his early promise, that he had the true mettle in him.

Now in order to make the responsibility, which the diploma thus imposes on a man, the more deeply felt, it is right and proper that the commencement of this responsibility should occur in the presence of his fellow-citizens. The publicity of the act brings home, to the inmost soul, its full meaning and value. Henceforth, young gentlemen, you must feel bound to labor with all your might, in the cause you have adopted as your own. The first step has been attained,—you have been crowned with the honors of the College. These impose on you labor and toil; and these you publicly accept as your duty. There are those here who will recollect this occasion, and others will know of the transactions of this night,—and now what remains for you, but a cheerful and zealous effort to accomplish what you have thus publicly assumed.

I congratulate you on the termination of your Collegiate life with so much credit. The Board of Trustees have endorsed

your fitness for the practice of Pharmacy; and the audience here assembled does you the compliment of welcoming you to your new labors. The scene before me is one calculated to make a young man's breast swell with delight: the grave and aged have come from their comfortable firesides to express their approval, the active and energetic citizen has not thought it a misspent hour to be with us this evening,—and many of that better and fairer portion of the human race—without whose smiles and cherished words life would often be a gloomy road—are here also to bid you God speed. It may be that some heart beats with more than usual quickness at the thought of your success this evening, and timidly but still joyously looks forth to the time when she will have the right to cheer you on the road of life, to be your helper, your consolation, your all of human joy. I charge you, young gentlemen, as you respect the approbation of your fellowmen, the good opinion of your fair country-women, the happiness of your future partner for life.—as you feel the claims of your responsibility to your fellowmen, vourselves and your God, to spare no exertion,—no labor to acquit vourselves honorably in your callings. Work while it is day for "the night cometh when no man can work."

In the past, much Quackery has been associated with Pharmacy, indeed the two were at one time, as we have seen, hardly to be considered as differing in any feature. Science has invested your calling with truth,—do not disgrace her by any association with the painted face and meretricious form of Quackery. "She is without, now in the streets, and lieth in wait at every corner." Flee from her, as from a contaminating pestilence,—have no association with that which is deceptive and dishonorable. In the words of the wise man—"Say unto wisdom, Thou art my sister; and call understanding thy kinswoman; That they may keep thee from the strange woman, from the stranger which flattereth with her words."

It is a noble and good thing to resist temptations to enter into a compromise with wrong. The mind acquires strength in this way, that enables it to overcome each successive temptation with more and more ease. But when the Rubicon, that divides truth and error, is once crossed, the return is a task of giant magnitude, which increases each day in difficulty until the mind is enveloped in error and has lost, for ever, the truth, which was its birthright. Strive to steer clear from the rocks of error and the quicksands of Quackery, as you guide your frail barks adown the stream of life. The reward of a clear conscience is more than sufficient to repay you for all the labor encountered in such an effort.

But, gentlemen, you will need more than human strength to accomplish the work I have hinted at, and your soul may well shudder at the thought of the task that you have this evening voluntarily assumed. There is, however, a source of strength which is attainable by the sincere and diligent seeker for it,a perennial fountain of life-giving vigor. There is a balm for every wounded heart, a cordial that will send life and strength and courage through all portions of your being,—and this is furnished by the great Physician of souls, who sells without money and without price. Enlist under His banner, and all the temptations of evil, the allurements of vice and the malicious tricks of the devil, shall prove of no avail against the armour you will bear. Under that banner, you can fight "the good fight of faith," and confidently await "the crown of righteousness" which will be awarded at the great "Commencement Day," when not only rewards, but also punishments shall be assigned.

And now it remains for me to break the connection which has, for two sessions, existed between us, and in employing that word of sad sound and mournful import, necessary for the purpose, let me tender to you the well wishes of the Trustees and Faculty of the College, with their hopes that your future lives may be marked with success and honor, and that you may so live, that at the close of life, your farewell to this world will be a joyous entrance upon an eternity of happiness. With assurances of warmest regard and hearty congratulations we say "Farewell."



